P&T committees generally focus upon the scientific data available concerning new drugs as they become available on the market. They are evaluated as being unique, similar to other already available products within a class of drugs, or occasionally classified as unacceptable based upon risk benefit calculations. The price of the drug and any rebate negotiations are generally not available to the committee.

Once the committee has made its determination as to the scientific importance of a new drug, the PBM will then negotiate rebate amounts and product positioning on the formulary. In general, P&T committees do not become engaged in this business activity. As a result, many clinically and cost effective drugs are routinely excluded from formularies as a matter of course.

Formularies often contain relative cost indices for comparable drugs, highlight preferred brands, and include treatment protocols, usage guidelines, and other clinical information.

Formularies are typically distributed to primary care physicians, but patients and pharmacists may also receive them, generally through Internet downloading. Electronic messages are often returned to pharmacists during claims adjudication indicating formulary status of the drug being dispensed. Formularies are typically produced yearly or every other year, with quarterly updates distributed during the interim.

Copied from Bystrom's report at 10.

Formulary management services allow a client to use the PBM's formulary and share in the manufacturer rebates. In general, employers and insurers have the least restrictive drug programs and will use their PBM's formulary, while MCO's have the most restrictive formularies and are more likely to develop their own formulary list of approved drugs. Drug formularies can be "open", "incentivized", or "closed".

Copied from Bystrom's report at 11.

- An **Open Formulary** is presented primarily for its historical interest. There are today very few open formularies where product access is not restricted. "Access" and "restricted" are the key operative words here. Frequently three or four tier structured formularies are mislabeled as "open formularies." They are not. Access is available but significant restrictions are in place which will be discussed later in this section under the "three-tier co-payment plan" discussion.

  The benefit plan design underlying the open formulary may have excluded certain drugs (i.e., OTC, cosmetic and lifestyle drugs) in the past. In the old open formularies, most drugs were reimbursed irrespective of their formulary status. There may have been rudimentary tiering of co-payments between brand and generic products.

- An **Incentive Driven Formulary** applies differential co-payments or other financial incentives to influence patients to use, pharmacists to dispense, and physicians to write prescriptions for formulary products.

Tracking data demonstrates that the market is highly sensitive to financial incentives wherein the consumer is required to contribute increased out of pocket payments for pharmaceutical products. For example, the rate of spending growth for the pharmacy benefit premium fell from 17.3 percent for 2000 to 10.1 percent for 2001.[29]

[29] For a comparison of other recent forecasts, see M. Merlis, "Explaining the Growth in Prescription Drug Spending: A Review of Recent Studies," August 2000, <aspe.hhs.gov/health/reports/ drug-papers/merlis/merlis-final.htm> (29 January 2001); and IMS Health, "IMS Health Forecasts 9 Percent Annual Growth in 10 Leading Global Pharmaceutical Markets through 2005," 14 June 2001,

This deceleration in premium cost trends is directly attributable to consumer cost sensitivity resulting from these out-of-pocket payments.

The introduction of tiered payment structures along with other forms of increased cost-sharing produced this deceleration in cost trend noted above. The lack of newer "blockbuster" drug market introductions contributed as well. This deceleration in cost trend compares favorably to the experience of the mid-1990s. At that time there was minimal consumer financial exposure.[30]

- A **Closed Formulary** limits reimbursement to those drugs listed on the formulary. Non-formulary drugs may be reimbursed if, on an exceptional basis, the drugs are determined to be medically necessary by the health plan.

Physicians, pharmacists, and health plan members are encouraged by PBMs, via mailings, electronic messaging, and other means, to prescribe and dispense formulary drugs. Plan members can also be given financial incentives to use formulary drugs.

Evidence of the prevalence of different formulary types is mixed. About three-fourths of HMOs have preferred or closed formularies (45% preferred or partially closed and 27% closed).[31] There has been a trend away from closed formularies, toward more preferred or partially closed formularies. Health care plans that are more closed systems, such as staff model HMOs; have higher rates of closed formularies (36.4%). In contrast, a survey of employers using PBMs revealed most employers (80%) prefer less restrictive formularies.

Copied from Bystrom's report at 11.

The market has evolved since 1999. Employers generally are now more aggressive than are health insurers in pushing members to convert prescriptions from retail to mail-order fulfillment. Employers are continuing to widen the difference between co-pays for second- and third-tier formulary medications. They are also stepping up the number of drugs subject to step-therapy requirements, in which a patient must first try a generic or lower-cost drug before a brand-name or higher-cost medication would be covered.[32],[33]

Copied from *Managed Care Week*.

Wyeth enjoyed success in favorably positioning its products on managed care formularies.

"Wyeth-Ayerst product line enjoys favorable coverage on most PBM formularies. Scott Levin's *Fall 2000 Managed Care Formulary Drug Audit Summary Report* identified Premarin, Prempro and Premphase as three of the top five brand name prescription drugs with the overall highest level of formulary acceptance. As a company, Wyeth-Ayerst is well positioned to pursue marketing initiatives base on *contracting platforms*."[34]

"Wyeth-Ayerst branded oral pharmaceutical sales through PBMs/processors are 30.9%. This figure, however, does not include the 14% of Wyeth sales that are through mail. Sixty-five percent of Wyeth-Ayerst sales are

Copied from WYE167226.

<www.imshealth.com/public/ structure/dispcontent/1,2779,1341-1341-129257,00. html> 5 (27 December 2001).

[30] Stephen Heffler, Sheila Smith, Greg Won, M. Kent, Clemens, Sean Keehan, and Mark Zezza; "Health tracking Trends;" HEALTH AFFAIRS; *March/April 2002*

[31] Novartis 1999

[32] "Managing Drug Costs"; *MANAGED CARE WEEK*; Nov 11, 2003,

[33] http://www.aishealth.com/DrugCosts/MCWAggressive.html

[34] "Contracting platforms" represent structures defined in the "Premarin Pre-emptive Plan" WYE 167226-167227.

managed/adjudicated by a controlled HMO or PBM (including mail service). In 2000, total Rx sales through PBMs were $1.6 billion dollars (minus $150 million in rebates). Merck-Medco alone accounted for over 31% of those sales and became the first PBM/Mail service pharmacy to be represented on the top ten list for Wyeth-Ayerst customer sales."[35]

Copied from WYE167226.

This favorable formulary positioning has continued to the present. As one of Wyeth's core promoted products, Premarin enjoyed a favorable formulary position on formulary/2nd tier or better relative to its individual market throughout the relevant period of 1999-2003. Prior to the spring of 2003, Premarin was essentially on all formularies in a favored position (see, e.g., WYE 119535 and WYE 204989). Premarin enjoyed the most favorable position compared to branded competitors within its market.[36]

Clients have the option of developing their own formulary or customize their PBM's national (i.e., standard) formulary. The purpose of exercising this option, to develop a formulary that better meets the needs or preferences of their practitioners and patients. This is typically done by health plans that have their own Pharmacy and Therapeutics (P&T) committee. Wyeth recognized the importance of this sub segment of the market:

> ..."In cases where the PBM is only playing an administrative role for the customer, the customer will develop its own formulary, which will be the key factor in influencing patient demand. As PBMs serve clients who develop and manage their own formulary, it is the client's formulary status and position of the product in question that will most likely impact utilization."[37]

When customizing a formulary, PBMs encourage their clients to consider the impact that deviations from the PBM's national, standard, formulary can have on their rebates.

PBMs routinely administer customized formularies on behalf of their MCO clients. Some large MCOs negotiate rebates directly with manufacturers and administer their own rebate programs.

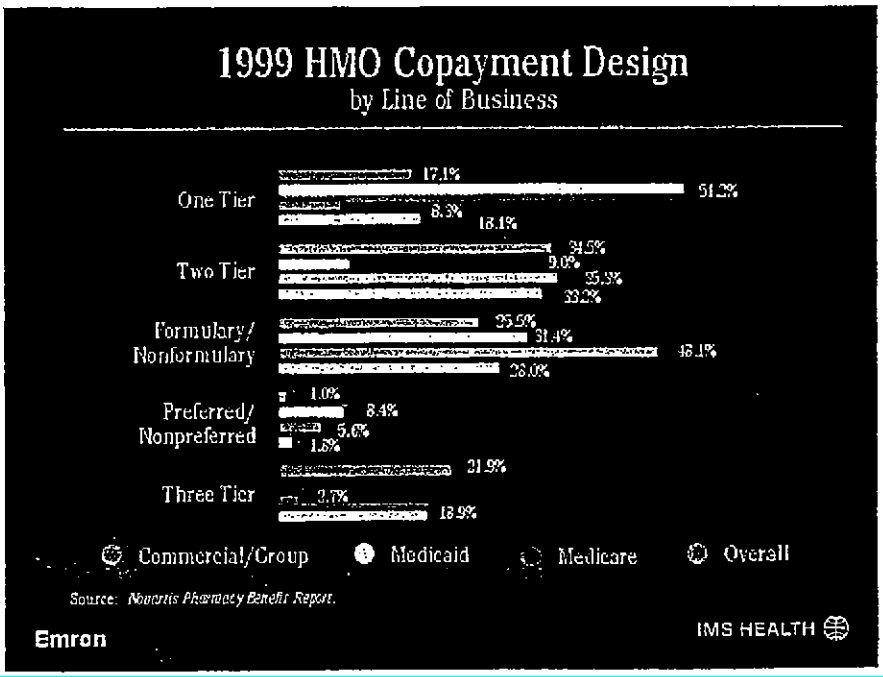
Copied from Bystrom's report at 11.

Copayment structure description

Cost sharing requirements in prescription drug programs require consumers to pay a portion of the cost of each prescription they obtain. This is referred to as the patient's copayment. The following graph illustrates the co-payment design prevalence within the market as of 1999.[38]

Copied from Bystrom's report at 12.

[35] WYE 167226
[36] AHP 295621 – "Managed Markets Diagnostic Report"; September 2003.
[37] WYE 167227
[38] Novartis Pharmacy Benefit Report 2000.



Copied from Novartis Pharmacy Benefit Report.

Wyeth made note of the increasing frequency of third tier structuring by payers. "The number of plans instituting a 3-tiered copay structure in 1998 was 36%. By the spring of 2000, that number had grown to 80%. With the potential shift from a defined benefit to a defined contribution model becoming more appropriate consumers will become even more sensitive to price differences among products that are characteristic of tiered co-pay arrangements."[39]

As a cost control effort of PBMs, copayments are targeted toward consumers in an attempt to shift some responsibility to them for the cost of their prescription utilization, raise their sensitivity to the cost of that utilization, or to encourage consumers to purchase formulary drugs that earn the PBM lucrative rebates. In this respect, copayments are used to provide incentives to encourage the use of drugs for which the PBM receives rebates from drug manufacturers.

Effectively, copayment requirements are a component of the benefit structure for prescription drug coverage and thus can vary across health plans managed by a given PBM.

Copied from Bystrom's report at 12.

Wyeth understood that the market sensitivity to brand retention was directly related to the size of the co-payment. The following data is taken from a study by Putnam Associates for Wyeth as part of their pricing planning.[40]

[39] WYE 167224
[40] Putnam Associates; The Premarin Family Pricing Project; August 21, 2002; AHP 256800-256935.

The Putnam Associates Brand/Co-pay Sensitivity Matrix developed for Wyeth: 6-Month Share Retention based upon Co-pay differential[41]

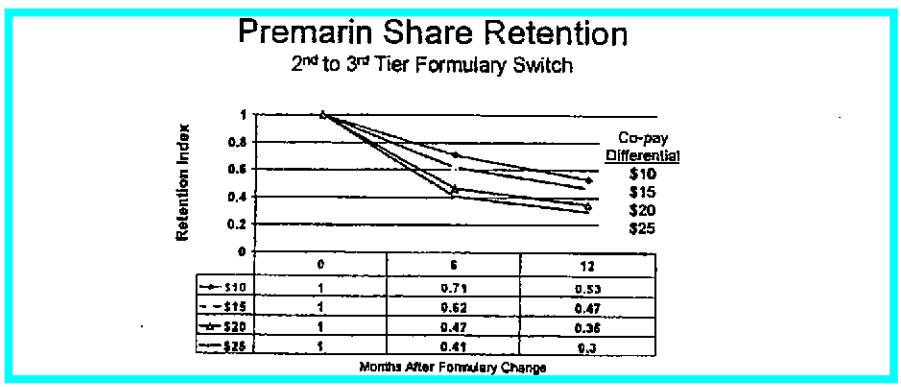
Copied from AHP256842.

Brand	Co-pay Differential			
	$10	$15	$20	$25
Prozac	0.82	0.77	0.67	0.36
Prilosec	0.75	0.68	0.55	0.50
Premarin				
Zocor	0.66	0.56	0.38	0.31
Prempro/PVC				
Fosamax	0.60	0.48	0.27	0.19

Differential brand/generic copayments specify higher copayment amounts on prescriptions for brand name drugs and lower amounts on prescriptions for generic drugs.

The following graph, taken from the same Putnam Case-Study Analysis,[42] demonstrates that at an average co-pay differential of $20 between the 2nd-3rd tier formulary position costs for Premarin, a predicted 53% of the market will be lost at 6 months and 65% will be lost at 12 months.

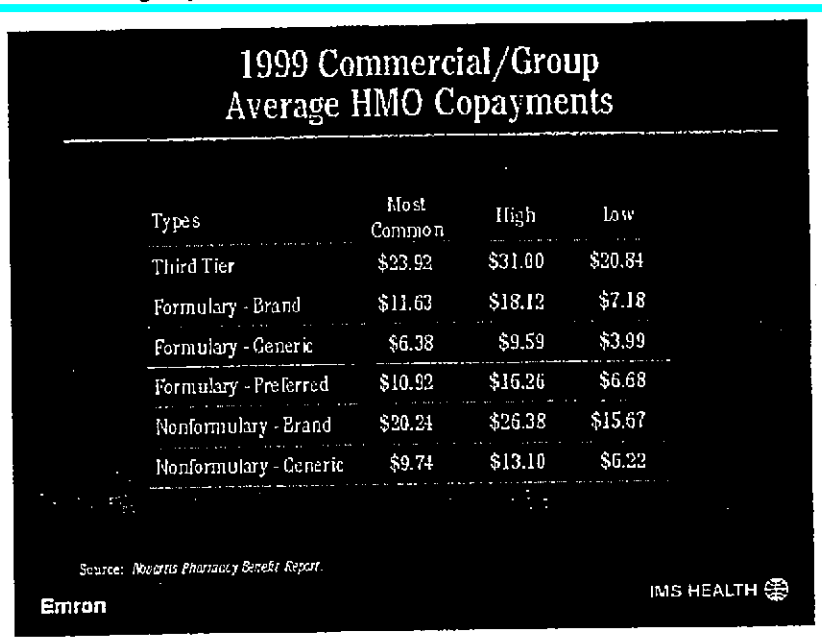
Copied from AHP256843.



Source: Putnam Case-Study Analysis WA05 020821 / AHP 256843

[41] AHP 256842
[42] AHP 256843

The following table illustrates the average copayments that existed in the commercial/group markets in 1999.[43]



1999 Commercial/Group
Average HMO Copayments

Types	Most Common	High	Low
Third Tier	$23.92	$31.00	$20.84
Formulary - Brand	$11.63	$18.12	$7.18
Formulary - Generic	$6.38	$9.59	$3.99
Formulary - Preferred	$10.92	$16.26	$6.68
Nonformulary - Brand	$20.24	$26.38	$15.67
Nonformulary - Generic	$9.74	$13.10	$6.22

Source: *Novartis Pharmacy Benefit Report.*

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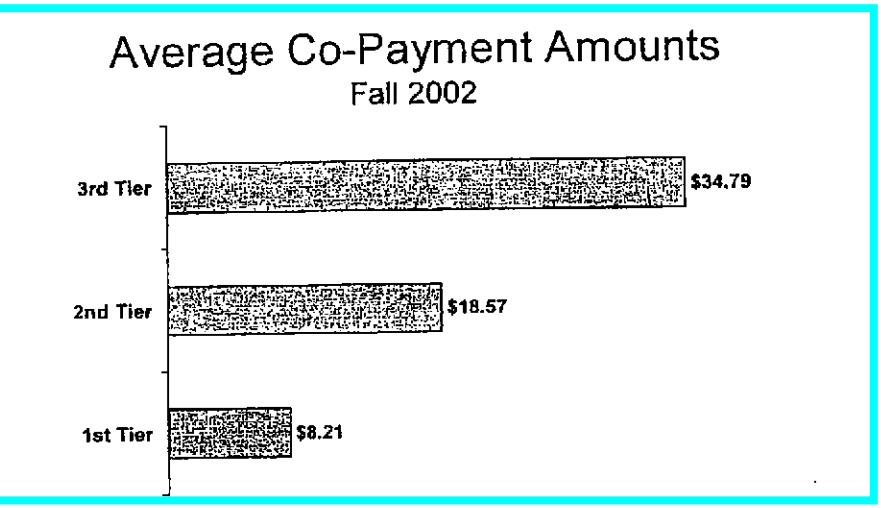
IMS HEALTH

Copied from Novartis Pharmacy Benefit Report.

As market conditions have changed, co-payments generally increased. The following demonstrates this increasing trend as of the Fall of 2002.



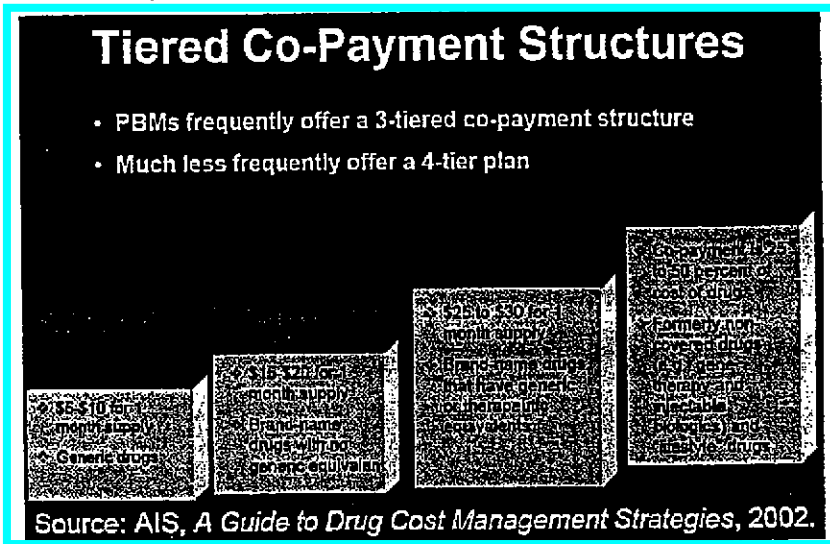
Copied from AHP340926.

Source: Scott-Levin; Managed Markets Customer Planning, 02/02
AHP340926

[43] Novartis Pharmacy Benefit Report 2000.

Tiered Co-Payment Structures

The following graph illustrates the structure of the various co-payment designs in the market today.



Copied from Health Strategies Consultancy presentation, "PBMs: The Basics and an Industry Overview."

AIS is AIS Health.com (http://www.aishealth.com/Products/newsdcr.html) and publishes the *Drug Cost Management Report*.

Two Tier Co-Payment Plans

The traditional co-payment structure for health plans has been the two tiered structure. Within this structure, there are only two co-payments. The first applies to generic drugs and carries a low co-payment amount, generally in the range of $5 to $10 per prescription fill.

The second tier consists of a co-payment amount for brand drugs on the formulary. These co-payment amounts have generally been two to three times the amount for the generic script.

All other brand drugs, not on the formulary, are not covered and the patient must pay the full retail price out of pocket for this medication unless the physician has obtained a prior authorization from the PBM for this drug.

Adapted from Bystrom's report at 12.

Three Tier Copayment Plans:

Increased demand for access to drug products by health plan members and rising pharmacy benefit plan costs for the health plan payers, have resulted in rapid adoption of a three tier copayment plan design.

Three tier copayment plan designs allow non-formulary drugs to be included within a member's drug benefit, which would not have been included in the two tier copayment plan design. The health plan member is charged a higher tier three copayment amount when a non-formulary brand drug is dispensed within their drug benefit.

Copied from Bystrom's report at 12.

The third tier copayment is their plan's highest copayment amount, often sizably more than the formulary brand drug copayment amount, since PBMs want to discourage use of drugs that cut into the market share of their formulary drugs.

Copied from Bystrom's report at 12.

Wyeth recognized the market dynamic that three tier copayment structures introduced into the managed care market:

> "Over the past 24 months, the landscape has changed within the managed care industry. Access has become moot with the implementation of 3-tiered (or more) copayment structures. Moving forward, Wyeth will employ a three-pronged approach in this customer segment. The first step is to maximize product growth where formulary position is optimal. Secondly, we need to drive demand with providers and patients when position may be an obstacle. Lastly, we must engage other entities, such as benefits consultants, who can drive Wyeth products with PBMs at other points of influence. These efforts will augment our existing competencies within the managed care market place."[44]

Copied from WYE167222 - WYE167223.

Tier three copayments impact plan members

Although a three tier copayment plan design allows for non-formulary drugs to be covered by a member's health plan, the member must pay the plan's highest copayment amount to acquire a non-formulary prescription.

Copied from Bystrom's report at 12.

Tier three co-payments often times create problems for the health plan members at the point of service in the pharmacy. In general most members are not totally familiar with all the elements of their prescription benefit plan. They are usually aware, if they have a prescription benefit, that they have a copayment responsibility for their prescriptions, and that generic drug copayments are less than brand drug copayments. The generic and brand drug copayments are usually fixed dollar amounts the member understands and remembers.

With the introduction of a tier three copayment, which may be a variable dollar amount, confusion often occurs at the pharmacy counter when the member is picking up their prescription because their copayment is not what they expected it to be.

When this situation occurs it is uncomfortable for the patient and time consuming for the pharmacy personnel. It can also create doubts in the member's mind about their physician's competency and knowledge of prescribing within the parameters of their prescription benefit plan.

PBM adjudication interface with pharmacy providers

One of the key services PBMs provide is the online adjudication of drug claims from pharmacies commonly referred to as claims processing. This process examines the member's eligibility and drug coverage to determine the pharmacy's reimbursement and member's copayment. In addition, edits are applied to ensure the clinical appropriateness of the drug dispensed and to increase formulary compliance.

The claims adjudication process begins at the point of service at the pharmacy. Upon receipt of the prescription, the pharmacist enters it into the pharmacy computer along

Copied from Bystrom's report at 13.

[44] WYE 167222 - 167223; Pharmacy Benefit Management Companies Business Plan; Kimberly France, Marketing Manager, Healthcare Systems Marketing; June 19, 2001.

with information from the member's drug card. This information is then electronically transmitted to the PBM's claims processing system.

Once the PBM's claim processing system receives the claim, it is adjudicated and the pharmacist receives a response confirming the member's eligibility and drug coverage. The pharmacist is informed as to the amount the pharmacy will be reimbursed together with the member's copayment to be collected.

During claims processing, the information submitted by the pharmacy is checked against the health plan's eligibility file to validate the member's name, benefit plan, and birth date. Upon confirming eligibility, the prescription is checked against the benefit design to confirm drug coverage and the corresponding copayment to be paid by the member. The claims processing system also determines the type of network pharmacy submitting the claim (either mail or retail), and calculates the appropriate reimbursement of ingredient costs and dispensing fee for the pharmacy.

The entire adjudication process is usually completed in a matter of several seconds. The PBM claims adjudication process is an on-line real-time transaction, much like a credit card transaction.

Copied from Bystrom's report at 13.

Rebates paid by pharmaceutical manufacturers to PBMs and MCOs

Rebates are not product discounts

The term "rebate" is defined by the Merriam-Webster dictionary as "a return of a part of a payment.[45]"It should be noted that rebates are not product discounts. They are fees paid to the PBMs or MCOs by the manufacturers as an inducement for including the manufacturer's product on the formulary and the payment is enhanced for favorable placement as a preferred product. Often the terms of individual rebate agreements are confidential and are not made public to the plan sponsor, the patient or the prescribing physician."[46]

Thus the rebate does not track with the product throughout the distribution chain from the manufacturer to the point of dispensing. In addition, rebates are frequently linked to incentives. These incentives bundle product groups and, in the case of Wyeth, had the potential of adding an additional 3 – 5% of the DCP as an incentive.[47] This bundling of product rebates leveraged the dominant position Wyeth enjoyed in the oral estrogen market into other classes of drugs such as oral contraceptives and antidepressants (Effexor).

Within this business structure, the entity purchasing the product may or may not receive a portion of the rebate. These rebates are delivered months after the transaction, generally 6 to 9 months later, to the PBM or MCO, not the customer. The rebate amount is generally based upon market share performance for the product on the formulary within its class rather than representing a discount on the actual purchase price for the product.

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[45] The Merriam-Webster Collegiate Dictonary; Eleventh Edition;First Printing 2003; p.1037.
[46] "Tug-of-War over Rebates"; Robert DiChiara, Patricia Pesanello, and Ellen Cappelino; *American Druggist*; May 1997.
[47] WYE009115 - Sec III, graph on group incentives

PBM and MCO contracting with pharmaceutical manufacturers most often involves negotiations between the two parties to determine positioning of the manufacturer's drug products on the formulary.

Copied from Bystrom's report at 13.

Rebate definition

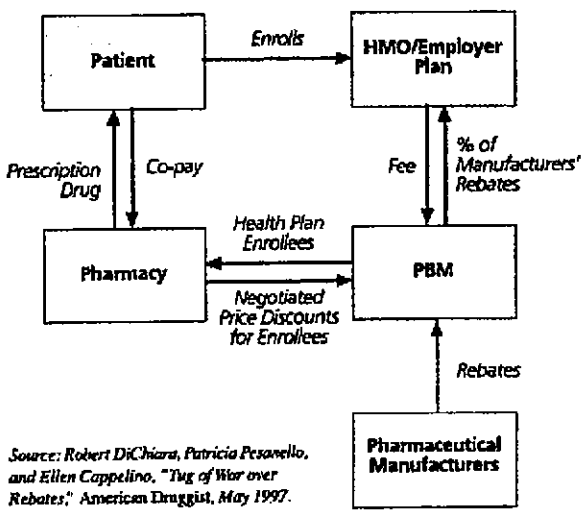
Brand pharmaceutical manufacturers usually enter into rebate contracts with PBMs and MCOs to maintain, protect or grow market share of their drug products and/or receive information and services from the PBMs and MCOs. Wyeth, leveraging its dominant position in the oral conjugated estrogen market, took the above rebate contracting to a more aggressive level. Wyeth entered into contracts with PBMs and MCOs to inhibit a competitor's entrance into the market.[48]

Generic drug manufacturers do not enter into these types of contracts because the PBM or MCO does not influence which generic brands are carried at the retail pharmacy.

Formulary positioning and the number of formulary drugs within a drug's product category are key factors which impact the drug's sales volume and market share within its therapeutic class. In creating a drug formulary where there are multiple sources within a given therapeutic class for product, the issue of rebates frequently becomes paramount to the PBM or MCO when determining formulary positioning for a drug.

The following graph demonstrates the flow of money within the typical rebate contract:

Follow The Money
PBMs Play Central Role in Rebate Flow



Source: Robert DiChiara, Patricia Pesanello, and Ellen Cappelino, "Tug of War over Rebates," American Druggist, May 1997.

Copied from National Health Policy Forum Issue Brief No. 749, "The ABCs of PBMs" at 7.

[48] WYE012690-91

Rebates now represent a significant component of PBM income:

As the PBM industry continues to consolidate the price competition for PBM services is becoming more aggressive. In order for PBMs to attract new clients there must be an incentive for such clients to transition from their existing PBM. These incentives exist as service enhancements and/or lower pricing from the PBMs for their core claims administrative services.

In the past PBMs have obtained a substantial portion of their profits from claims administration fees charged to their clients for processing the prescriptions of their members. In addition to the claims administration fees PBMs have derived profits from drug manufacturer rebates and administration service fees, clinical service program fees, and differentials in pricing between the amount charged to their clients and the amount paid to their pharmacy providers, for member prescriptions processed.

As the PBM industry competes aggressively for new clients, the PBM profits derived from their administration fees has diminished and their manufacturer rebates with their associated manufacturer derived administration fees have become a more significant component of the PBM's total profitability. For some PBMs brand drug manufacturer rebates and associated fees account for over 50% of their total gross margin dollars. This makes drug manufacturer rebates and their associated fees extremely important to the profitability of most PBMs.

Copied from Bystrom's report at 14.

The importance of rebates

The following hypothetical example illustrates the power rebate contracts have in the market where a new entrant challenges an existing manufacturer that holds a dominant market position within a class of drugs. The example uses the conjugated estrogen market to illustrate the concept.

The following issues are illustrated in the following graph:

1. The importance of the rebate can and generally has exceeded the importance of product price as the MCO creates its formulary.
2. Rebates only apply to brand products. Therefore, even with a 19% market share, generic Estradiol is not a player in the rebate formulation.
3. Premarin's overwhelming market share gives the product great leverage in the rebate generated for the MCO.
4. Thus, if a manufacturer such as Wyeth threatens to withdraw the rebate for reduced market share performance, a competitor can not overcome this advantage even with reduced WAC and increased rebates.

Rebate Example

Drug	Premarin 0.625 mg	Cenestin 0.625	Menest[1] 0.625	Generic Estradiol[2] 1 mg
AWP	$0.96	$0.87	$0.54	$0.32
% Rx	75%	3%	3%	19%
# Rx	2717	93	122	686
Cost AWP/30d	$78,250	$2,427	$1,976	$6,586
Rebate % WAC	5%	15%	20%	0%
Rebate $	$3,138	$288	$314	$0

1. Menest is an esterified estrogen. It contains a mixture of the sodium salts of the sulfate esters of the estrogenic substances, principally estrone, that are of the type excreted by pregnant mares.

Rebate amount and allocation to the PBM's clients:

Rebates and administrative fees are commonly calculated and paid as a percent of the drugs' cost, generally defined by the manufactures direct catalogue price (DCP). The size of the rebate can range up to 15% of DCP. Rebates greater than 15% are rare, since they might cause manufacturers to exceed their "Medicaid Best Price" rebates and trigger re-pricing of government contracts.

The Medicaid rebate program, established by the Omnibus Budget Reconciliation Act of 1990, was established to help contain government spending on outpatient prescription drugs. Under the basic rebate formula, pharmaceutical manufacturers pay a rebate equal to at least 15.1 percent of the average price they earn on sales to retail pharmacies for brand-name drugs purchased by Medicaid beneficiaries. The basic rebate is often higher than that 15.1 percent minimum because of a "best-price" provision that gives Medicaid access to the lowest price paid by any private purchaser in the United States.

The best-price provision increases the Medicaid rebate when a manufacturer gives a discount that exceeds the minimum rebate of 15.1 percent. In such cases, the Medicaid rebate is equal to the largest reported discount given to any private sector purchaser. Since Medicaid constitutes about 12 percent of the outpatient prescription drug market, pharmaceutical manufacturers are less willing to give large private purchasers steep discounts because they are required to give Medicaid access to the same low price.[49]

[49] "Pricing Mechanisms Used By The Federal Government To Contain Prescription Drug Costs", by Anna Cook, Ph.D., Mathematica Policy Research, Inc., *August 8-9, 2000,Leavey Conference Center, Georgetown University, Washington, DC*

Copied from Bystrom's report at 14.

Factors influencing rebate levels

There are several factors that may influence the level of rebate provided to PBMs or MCOs by pharmaceutical manufacturers for listing their drug(s) on formulary:

1. The number of drug product classes of the pharmaceutical manufacturer's products that are included in the formulary.
2. The number of individual drug products that are included within each drug product class for the contracting pharmaceutical manufacturer.
3. The degree of control over drug product selection which is afforded by the PBM's drug plan design:
   - **Low control:** The formulary is considered "open" with no prescribing restrictions within the coverage of the member's drug benefit; without benefit designs or financial incentives tied to formulary drug selection. Rebates are rare at this level of formulary control.
   - **Medium control:** There are plan design and/or financial incentives tied to formulary drug selection.
   - **High control:** The formulary may be considered "closed" in which case only those products listed on the formulary are included within the member's drug benefit; or, the formulary may indicate certain drugs as "preferred" with substantial plan design and/or financial incentives tied to preferred drug product selection, or financial disincentives associated with the selection of a non-preferred product.

Rebates are paid for formulary position, which impacts the market share of the pharmaceutical manufacturer's drug product.

The primary concern of the pharmaceutical manufacturers is that their products are included on the formularies. They also don't want any negative positioning or financial disincentives for their drugs compared to their competitor's products.

Copied from Bystrom's report at 15.

The amounts of the rebates paid vary depending on the contracting abilities of the PBM, the number of covered lives, the pharmacy benefit, and the group's utilization patterns.[50]

Copied from Bystrom's report at 16.

[50] "Managed Care Pharmacy Practice", Robert P. Navarro, Aspen Publishers, Inc. 1999, page 71

Retail Vendors[51]

Pharmaceutical acquisition

Retail pharmacies obtain their pharmaceutical drug products almost entirely from two sources, drug manufacturers (including re-packagers) that establish the NDC number (see below for definition) for the product based upon the product's packaging and drug wholesale distributors that distribute prepackaged products.

Copied from Bystrom's report at 17.

Pharmaceutical reimbursement

Pharmacies purchase pharmaceutical products from wholesalers and drug manufacturers and then sell their prescriptions to patients, most of which have a portion of their prescription costs paid by their health plan, administered through a PBM.

Pharmacies are reimbursed by the PBMs (as a pass through from their clients) for the ingredient cost of the drug dispensed plus a dispensing fee, less the member's copayment.

Claims adjudication and formulary compliance

Approximately 55,000 retail pharmacies in the United States process between 70% and 90% of their prescriptions on-line through a PBM. There are several key factors which enable retail pharmacies to process prescriptions to a PBM in a real-time environment. These include:

Electronic transmission standards and data set definitions:

The pharmacy industry utilizes a well-defined set of data transmission standards and data field definitions, developed and maintained by an industry-wide standards development organization, The National Council of Prescription Drug Programs (NCPDP).[52]

Copied from Bystrom's report at 18.

NDC Number:

The National Drug Code, or NDC number, uniquely identifies prescription drugs. The NDC number is used to accurately and uniquely identify drugs in the prescription-processing environment. The NDC number is the identifier used by pharmacies when submitting prescription information to a PBM for processing and payment. An NDC number is much like a UPC (bar code) number. It is a 10-digit number assigned by the FDA which uniquely describes a product and its packaging.

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[51] Many of the definitions used in this section were developed in collaboration with Dale Bystrom when we worked together on the Duramed Pharmaceuticals Inc. vs. Wyeth-Ayerst Laboratories, Inc., Civil Action No. C-1-00-735, In the United States District Court for the Southern District of Ohio.

[52] NCPDP (National Council of Prescription Drug Programs) is a non-profit, standards development organization comprised of individuals and organization representatives from all segments of the third-party prescription drug program industry.

Electronic Pharmacy Computer Systems:

Pharmacies process prescriptions electronically through their pharmacy computer system. As previously described, when a patient submits a prescription to a retail pharmacy to be filled and dispensed, the prescription is entered into the pharmacy's computer system for processing and data warehousing. If the patient has a drug benefit that provides payment coverage for their patient's prescription, the pharmacy adjudicates the prescription information on-line, real-time to the appropriate PBM for processing and payment. The PBM verifies the patient's eligibility and drug coverage, performs numerous checks and edits on the submitted prescription information and returns electronic messages to the submitting pharmacy.

The information received from the PBM by the pharmacy will indicate several things to the pharmacist, such as:

- If the patient is eligible for prescription coverage
- If the submitted prescription is covered by the patient's drug benefit plan
- The patient's copayment amount
- Drug utilization safety messages

Copied from Bystrom's report at 18.

NDC Blocks:

NDC blocks are system edits, administered by PBMs, which are put in place to indicate that a uniquely identified drug is being blocked from coverage within a patient's drug benefit plan. NDC Blocks are sometimes applied to a specific drug within a therapeutic class indicating that drug is not included in the formulary of a patient's health plan.

When a pharmacy submits a drug, which has an NDC block in the PBM's system, it will receive back a "reject code" from the PBM administering the patient's pharmacy benefit. This reject code is an indication to the pharmacy that the submitted drug is not covered by the patient's health plan.

An NDC block is one of the most effective tools the PBM uses to prevent a non-formulary drug from being dispensed to a patient with a drug benefit plan.

Copied from Bystrom's report at 19.

Soft Edits:

Soft edits are advisory messages, returned to the submitting pharmacy from the PBM during the prescription adjudication process. The purpose of a soft edit message is to alert and educate the pharmacist about the prescription being processed.

Often times a soft edit message will alert the pharmacist that there is a drug which is "preferred" by the health plan as an alternative to the drug that was initially submitted by the pharmacist.

The soft edit does not stop the submitted drug from being processed and paid, unlike an NDC block, but rather it suggests to the pharmacist to consider contacting the prescribing physician and recommend an alternative drug to the one originally prescribed. (There may be financial incentives for the pharmacist to contact the physician.)

In addition to the above, the retail pharmacy may also insert messages that alert the dispensing pharmacist of incentive programs that may exist between the manufacturer and the retail company.

Soft edits are an effective tool that PBMs use to increase formulary compliance and preferred drug utilization in drug benefit plans that have an open formulary structure.

Copied from Bystrom's report at 19.

Prior Authorization:

Some drugs are indicated on the PBM's formulary as requiring the prescribing physician to obtain prior authorization from the member's health plan before the drug is eligible for payment within the member's drug benefit.

The following table summarizes the use of prior authorization by line of business within the managed care dominated health care environment in 1999.[53]

Copied from Novartis Pharmacy Benefit Report.

1999 Use of Prior Authorization
by Line of Business

	Commercial/ Group	Medicaid	Medicare	Overall
Use Prior Authorization	94.1%	82.9%	81.4%	88.3%
Apply to Select Therapeutic Classes	79.8%	67.9%	81.8%	77.9%
Average Prior Authorizations Requested PMPM	0.08	0.03	0.14	0.08
Average Percentage of Approvals	74.0%	81.6%	69.0%	74.0%

Source: *Novartis Pharmacy Benefit Report.*

Emron IMS HEALTH

PMPM – per-member-per-month

Prior authorizing a drug can be a significant barrier to its being prescribed by the physician and subsequently dispensed by the pharmacy provider. Prior authorizations are a discouragement for the physician to prescribe drugs that are not on formulary. Prior authorizations represent one more "hoop the physician must jump through" to get a health plan to approve payment for a non-preferred drug.

Copied from Bystrom's report at 19.

Prior authorization is usually required for the most expensive drugs, especially if there is a cheaper alternative available. Prior authorization is also frequently required even in the case of one-of-a-kind drugs for which there are no alternatives available. In these cases, prior authorization is used to make sure that the drug is not being prescribed for an unapproved use.

The process of obtaining a prior authorization for the physician can range from a relative simple process to a very complex process which may involve step therapy protocols,

[53] Novartis Pharmacy Benefit Report 2000.

depending upon the cost of the medication being prior authorized relative to alternative formulary medications within the same therapeutic class of drugs.

Copied from Bystrom's report at 19.

A step therapy protocol may require a physician to prescribe older and less expensive drugs in a therapeutic class before prescribing newer and more expensive equivalents.

Copied from Bystrom's report at 20.

Pharmacy's Relationship with Pharmaceutical Manufacturers

Pharmacy retailers have minimal control over which drug product is dispensed and minimal impact on influencing the market share of a given drug product because a drug product's selection is primarily directed by formularies or preferred drug lists generated by PBMs.

PBMs, through the use of their formularies, manage about 70% of the more than 3 billion prescriptions dispensed in the U.S. annually.[54]

[54] Finding of 2003 GAO Report on Federal Employee Health Benefits Plan (FEHBP).

Physicians

Managed care's effect upon the physician

The pre-managed care market:

Prior to the mid-1980's managed care played a marginal role in health care underwriting. Indemnity insurance covered most of the employer sponsored health insurance benefit market and managed care was not a factor in government entitlement programs at either the state or the federal level.

Physicians cared for their patients and prescribed pharmaceuticals based upon their experience and training. While physicians were "detailed" by most of the brand pharmaceutical manufacturing companies' sales forces, there were no physician-directed or health insurance company financial inducements to preferentially select a particular drug.

Prior to online adjudication, there was no readily available performance data available to the manufacturer to use in targeting specific physicians. Today this targeting is based upon prior prescribing patterns distributed regularly, usually by quarter or by month, from data vendors such as IMS.[55]

Patients took the physician's prescription to the pharmacy and the pharmacist dispensed the drug. Pharmacies stocked products based upon the prescribing patterns of the physicians in their immediate market. Pharmaceutical manufacturers played little role in influencing the inventory carried by dispensing pharmacies.

Frequently, pharmacists and physicians would confer concerning the most appropriate drug to administer to the patient. The patient then paid for the medication out of his or her own pocket.

The managed care dominated market:

All of the above changed starting in the later half of the 80's, managed care evolved into the dominant form of underwriting in both group health coverage and much of the state and federal entitlement markets. In 1976 there were six million people enrolled in HMOs. By 1995 that number had reached 58.2 million.[56] In 1960 public and private expenditures on health care amounted to $26.8 billion; by 1994 this amount had grown to $949.4 billion. Spending for pharmaceuticals accounted for 8.2% of this total.[57]

This rapid inflation in medical spending, relative to the general consumer inflation rate, caused a paradigm shift in healthcare insurance from fee-for-service reimbursement to a managed care dominated market.

This transition introduced a third party whose financial performance was dependent upon confining the decision-making parameters for both physicians and pharmacists. Neither the prescriber nor the dispenser of medications worked solely for the patient any

[55] http://www.imshealth.com/ims/portal/pages/homeFlash/us/0,2764,6599,00.html
[56] Medical Interface's Facts & Figures, Bronxville, New York, Medicom International 1996.
[57] Medical Interface's Facts & Figures, Bronxville, New York, Medicom International 1996.

longer. They also answered to MCOs with management structures that became more complex and distant each year.

Prescribing Medications in the Managed Care Environment

Over the past two decades, the business environment in healthcare has been transformed into a complex and, for the physician, incomprehensible third party payor system. Insurance intermediaries have launched complex managed care products, including a wide variety of pharmacy benefits structures, into the market. These intermediaries then turn to the physician and expect him/her to manage these benefits in the ambulatory environment without any information system infrastructure to accomplish this assignment.

How the pharmacy benefit impacts physician decision making

The National Drug Code Directory[58] lists fourteen major drug classes with each containing multiple subclasses. Over fifty-one thousand drug products are listed in this classification system.[59]. Between 1975 and 1999, 548 new chemical entities were approved by the FDA as prescription drugs. [60,61]

Formularies are organized by the classes and subclasses described in the National Drug Code Directory. Each formulary generally provides at least one medication for each of these classifications. Any of these "favored" drugs is subject to change based upon the PBM's contractual relationships with the various manufacturers. In fact, any printed formulary that is distributed to physician offices by an insurance company is generally outdated the month it is delivered. The "favored" or "preferred" drugs are frequently different for each PBM / MCO and often for each of the PBM's / MCO's clients.

From the physician's perspective, formularies represent an incomprehensible listing of drugs that are "favored" by the underwriter of the pharmacy benefit. Physicians soon learned that formularies are not intuitive. That means that different drugs are "favored" not based on data in the peer-reviewed scientific literature but based on business considerations.

On average, a physician deals with more than six different drug formularies daily.[62,63] Each formulary has different "favored" drugs; the practicing physician is expected to

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[58] The NDC System was originally established as an essential part of an out-of-hospital drug reimbursement program under Medicare. The NDC serves as a universal product identifier for human drugs. The current edition of the National Drug Code Directory is limited to prescription drugs and a few selected OTC products

[59] The major drug class is a general therapeutic or pharmacological classification scheme for drug products reported to the FDA under the provisions of the Drug Listing Act. The classification scheme used was based on the AMA DRUG EVALUATIONS SUBSCRIPTION and generally follows the organization of material in that publication. The drug class for each product was determined by the labeled indication.

[60] Safety of Newly Approved Drugs: Implications for Prescribing; Robert J. Temple, MD; Martin H. Himmel, MD, MPH; JAMA / volume:287 (page: 2273);May 1, 2002

[61] Timing of New Black Box Warnings and Withdrawals for Prescription Medications; Karen E. Lasser, MD, MPH; Paul D. Allen, MD, MPH; Steffie J. Woolhandler, MD, MPH; David U. Himmelstein, MD; Sidney M. Wolfe, MD; David H. Bor, MD; JAMA / volume:287 (page: 2215); May 1, 2002

[62] *Minnesota Medicine*, January 2001/Vol 84.

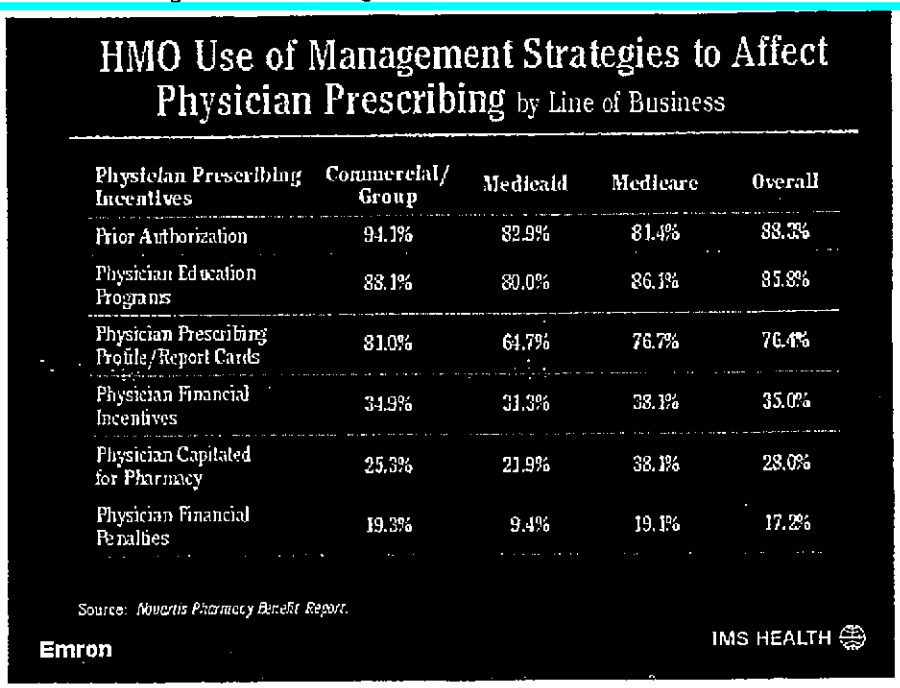
[63] *Minnesota Medicine*, January 2001/Vol 84.

know the "favored" drug and the co-payment structures for hundreds of different major and minor drug classes.

The prescribing process

The following chart summarizes the various tools used by PBMs to influence physician decision making within the managed care environment.[64]

Copied from Novartis Pharmacy Benefit Report.



Physician Prescribing Incentives	Commercial/ Group	Medicaid	Medicare	Overall
Prior Authorization	94.1%	82.9%	81.4%	88.3%
Physician Education Programs	88.1%	80.0%	86.1%	85.8%
Physician Prescribing Profile/Report Cards	81.0%	64.7%	76.7%	76.4%
Physician Financial Incentives	34.9%	31.3%	38.1%	35.0%
Physician Capitated for Pharmacy	25.3%	21.9%	38.1%	28.0%
Physician Financial Penalties	19.3%	9.4%	19.1%	17.2%

Managing the dispensing and use of pharmaceuticals represents a major time commitment for physicians in practice. A typical primary care doctor writes as many as 30 prescriptions or more daily and handles an equal number of prescription renewals.[65]

Within managed care, the prescribing process can best be described as classic Pavlovian pain avoidance conditioning for most practicing physicians. The average primary care physician spends 40 minutes a day on managed care (mostly around referral and prescription issues).[66]

Both formulary compliance calls and renewals, usually triggered by a call from the pharmacist, are particularly time consuming. Sixty-one percent of doctors who were questioned said insurance plans (MCOs/PBMs) denied coverage for a prescription drug for one of their patients on a weekly basis.[67] Studies of doctors' offices[68] found that

[64] Novartis Pharmacy Benefit Report 2000.
[65] Proprietary data (various dotcoms, RxPhysician.com, IMS & various PBMs).
[66] *The Western Journal of Medicine;* March, 2001.
[67] Studies of doctors' offices by Merck-Medco, 1998
[68] Studies of doctors' offices by Merck-Medco, 1998

nurses on average spend 80 percent of their time handling prescriptions. For doctors, the average is 30 minutes or more per day.[69]

More than half of the clinical calls to doctors concern pharmacy issues centering upon refills and formulary issues.[70] To handle a pharmacy call, the physician's staff must pull the patient's chart. On average, every chart in a doctor's office is pulled 6.5 times each year. Each chart pull generates 3 hours of overhead and costs $5 to $7 or more per hour.[71]

Traditionally, PBMs have used mailings, faxes and phone calls to contact doctors. Merck-Medco Managed Care made about 2 million phone calls to doctors' offices in the course of managing 322 million prescriptions, according to the company. While the above is generally viewed negatively by physicians, it should be said that most physicians welcome drug-utilization data such as how their prescribing habits compare with national benchmarks.

Prescribing a non-"favored" drug will produce significant discomfort for a practicing physician. He/she will often receive a phone call from the dispensing pharmacist usually informing him/her that his/her patient is standing at the counter, in some distress, and the medication the physician prescribed is not covered. To get the patient the non-covered drug he/she prescribed, the physician must fill out a "prior-authorization" form and send it to the PBM processing the pharmaceutical claim.

Because each PBM or MCO has a different form, most physicians do not have the right form in their office. Getting the form requires calling the PBM and having them fax the form to the physician's office. Unless the form is fully and accurately filled out, the claim is denied.

Given the above, over 93% of practicing physicians indicate that it is either difficult or extremely difficult to obtain coverage for a non-formulary drug for their patients.[72] As a result, most physicians are exasperated by the time dedicated to PA paperwork. Physicians are reporting that they now routinely fill out up to 10 prior authorization forms a day.[73]

Community pharmacists, who are on the receiving end of this transaction, complain about the administrative burden of PA programs as well. On average, a supermarket chain pharmacy spends 2.15 minutes and an independent pharmacy spent 2.97 minutes just on rejection resolution for each prescription that required a prior authorization.[74]

After experiencing the above chain of events, few physicians will try to get an off formulary or a non-preferred drug for their patient even if they feel an alternative is more efficacious and is indicated for the patient's clinical condition.

In addition to all of the above, if physicians consistently prescribe off formulary, they are flagged by the PBM for individual attention and instruction.

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[69] *Hospitals & Health Networks*, Michael Menduno, July 1999.
[70] *Hospitals & Health Networks*, Michael Menduno, July 1999.
[71] *Hospitals & Health Networks*, Michael Menduno, July 1999.
[72] *Minnesota Medicine*, January 2001/Vol 84.
[73] Personal conversations with physicians in multiple markets across the United States.
[74] Herrier RN, Spencer JR, Davis CD. Case study using descriptive analysis to estimate hidden costs in processing third party prescriptions. J Am Pharm Assoc 2000; 40(5): 658-65

> For example, the Medco Contract provides: "Physicians representing a minimum of ninety (90%) percent of prescriptions written for competing branded oral estrogens dispensed at retail for (health plan) members will be contacted (by telephone or written correspondence referring to Premarin, other than simply mailing the formulary) by Medco, as medically appropriate, at least once per Contract Quarter to advise them of Premarin's preferred formulary status. Failure by Medco to contact physicians as required above in any Contract Quarter will result in a reduction in rebates to Medco for Premarin dispensed at retail in the subsequent Contract Quarter."[75]

As a result, PBMs have become proactive in their management of the formulary with physicians. Merck-Medco Managed Care made about 2 million phone calls to doctors' offices during the course of a year in the processing of 322 million prescriptions.[76] The company also uses e-mail to contact doctors as an "adjunct" to its normal mailings and phone calls.

All of the above equates to pain for the physician. Since no human being can keep up with all the variables that go into formulary maintenance described above, the physician tends to identify the drugs he commonly prescribes (generally 20 to 40 medications)[77] based on whether they are included in the major contracts they service.

This latter phenomenon is referred to within the industry as the "spillover" effect. It is known that if a pharmaceutical manufacturer succeeds in getting their products classified as preferred on the major PBM formularies, then the physician will likely begin using that product on all of his/her patients. When prescribing for self pay patients, where there are no managed care barriers to selecting alternatives, physicians will generally prescribe the on formulary drug.

Physicians and the Prescribing Process[78,79]

A comprehensive evaluation of the physician's view of the prescribing process was performed by California Health Decisions with their publishing the results of their research in June of 2001.[80]

The report examined a series of issues including physicians' experiences when prescribing medications. The following information, extracted from this report, deals with this issue.

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[75] WYE 006084 – 6.1.1

[76] *AMNews;* Carolyn Hirschman; June 28, 1999./public/journals/amnews/amnews.htm

[77] Proprietary data (dot.coms, RxPhysician.com, IMS & various PBMs).

[78] California Health Decisions' (CHD's) Healthcare 101 project. The purpose of the report is to describe survey research conducted with 81 California primary care physicians. The analysis examines their views on prescription medication issues and identifies differences and similarities among physician and consumer opinions.

[79] The Seattle-based firm Endresen Research was commissioned by CHD to participate in designing the survey and to carry it out. A total of 1,154 primary care physicians received a letter from CHD explaining the research and inviting them to participate in an 18-minute phone survey. A total of 81 physicians completed the survey (7 percent response rate). The survey sample included physicians from northern and southern California who contract with PacifiCare, Blue Shield, and HealthNet, as well as those employed by Kaiser Permanente.

[80] California Health Decisions (CHD) is a non-profit organization dedicated to involving the public in policies and practices decisions that affect their healthcare. CHD, which is affiliated, with American Health Decisions, was founded in 1985.

- Specific concerns cited include obtaining approvals for formulary exceptions, named as a "major problem" by nearly 68 percent of those surveyed.
- Access to formularies for specific health plans was named a "major problem" by nearly two-thirds of physicians surveyed.
- More than one-third of physicians named "formulary restrictions" as the greatest source of frustration when asked to describe, in their own words, barriers or problems they experience with respect to prescription medications.

In an open-ended portion of the interview, physicians were asked how the formulary process could be improved.

- Several expressed the wish that formularies could be broadened to include more medications. "The formularies need to be opened up quite a bit to give more leeway to the physician," was one comment.
- In addition, providers would like to have readier access to health plans when formulary questions arise. "Waiting time for approval" was cited as frustrating, as was inability to reach the plan in a timely manner. As one physician put it simply, "Please answer the phone."
- Another physician would like to "speak directly to the doctor who is making the decisions" when coverage for a particular medication is at issue.
- Finally, several physicians remarked that keeping up with multiple formularies is burdensome, and suggested that standardization among plans, regions, or medical groups would smooth the process. "It takes too much time to go through individual listings from separate companies," noted one provider.

Wyeth-Ayerst Laboratories, Inc.'s marketing Strategy

Copied from Bystrom's report at 22.

Wyeth (American Home Products, AHP) is one of the world's largest research-driven pharmaceutical and health care products companies. Wyeth employs in excess of 52,000 people worldwide, with their Pharmaceutical products division comprised of over 38,000 employees.

In 1999 Wyeth posted sales in excess of $13 billion, listing their total assets in excess of $23 billion. In 1999 Wyeth's Premarin family of products approached sales of $1.8 billion, up 8 percent from year prior.[81]

In the United States Wyeth markets their pharmaceutical products and services directly to most all major constituents within the health care industry; pharmacy benefit management companies, managed care organizations, governmental agencies, physician groups and retail pharmacy organizations.

Wyeth Managed Care's documents indicate that formulary structure was of importance to the company.

The following represent a few examples:

- **(WYE 187812)** When discussing "availability" of competitive products on a three tier plan.
    1. All products are available, however
    2. Third tier is non-formulary (though) the patient can (get the drug) by paying more out of pocket for it.
    3. What that means is when a physician prescribes the non-formulary product; the patient has higher out-of-pocket costs. Thus the patient can get a Premarin Family product for a lower out of their pocket cost.
    4. Remind physicians and office staff that seniors pay more out of their pocket for non-formulary products.
    5. (By saving the patient money, the physicians office will) experience less callbacks and time spent switching patients.

[81] www.wyeth.com

(WYE 204989) – demonstrates the "formulary status for the Premarin Family and its competition" as of March 2001 for the various HRT/ERT products.

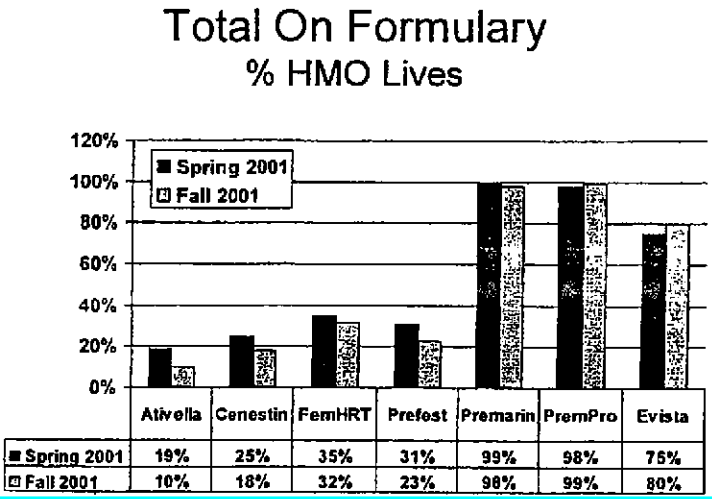
	Activella	Cenestin	Evista	Femhrt	Ortho Prefest	Premarin	Premphase	Prempro
On formulary	4.9%	9.9%	65.8%	31.5%	21.6%	99.2%	97.3%	97.8%
Not on formulary	95.1%	82.6%	22.2%	67.3%	77.2%	0.8%	2.7%	2.2%
Prior authorization	17.3%	21.6%	16.6%	15.1%	18.2%	0.6%	1.8%	1.5%
3rd tier/ higher copay	97.0%	85.1%	33.8%	60.0%	65.0%	0.2%	3.2%	1.9%
Not listed on formulary but covered	27.4%	26.5%	7.6%	18.5%	21.6%	0.7%	0.6%	0.5%

Copied from WYE204989.

- **(WYE 203120-22)** provides a bit more detail concerning the HRT/ERT formulary coverage as of the fall of 2001.

  - **Total on Formulary** – "This combines the total Rx eligible lives covered on formulary with prior authorization or restrictions and on formulary with no restrictions or prior authorization requirements. On formulary does not include third-tier co-payment status and can be interpreted that a product is available at second-tier or better."

Copied from WYE203120 - WYE203122.



Source: WYE 203122

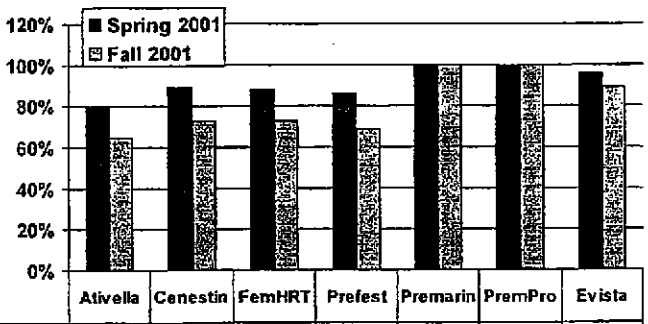
Copied from WYE203120 - WYE203122.

Note: "Total On Formulary" does not include Rx eligible lives associated with a three-tier benefit design.

- "Total formulary coverage for the Premarin Family remained consistent between the spring and fall audit cycles while formulary coverage decreased for the majority of HRT/ERT products, excluding Evista. Evista experienced an increase in its formulary coverage, from 75% in the spring to 80% in the fall."[82]

- **Total Coverage** – "This is the total Rx eligible lives covered by plans that list a drug on formulary plus the total number of plans that list a drug as non-formulary but still covered."

Total Coverage



	Ativella	Cenestin	FemHRT	Prefest	Premarin	PremPro	Evista
Spring 2001	80%	89%	88%	86%	100%	99%	96%
Fall 2001	65%	73%	73%	69%	100%	100%	89%

Source: WYE 203122

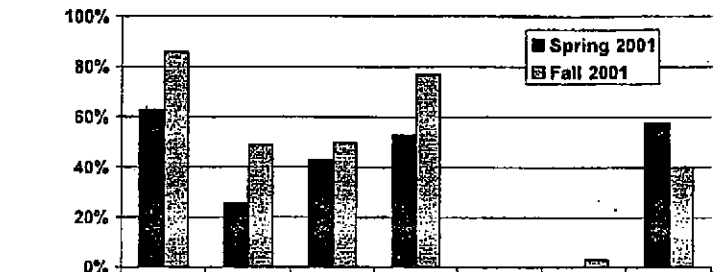
- "Total coverage for the Premarin Family remained consistent between the spring and fall. Meanwhile, all remaining HRT/ERT products experienced a decrease in their total coverage of HMO members. Ortho-Prefest experienced the greatest decline in percentage of total coverage during the fall 2001 audit cycle."[83]

[82] WYE203121
[83] WYE203122

Copied from WYE203123.

- **Prior Authorization** – "The need for a physician or pharmacist to obtain prior approval from a health plan before coverage of the drug guaranteed."

Prior Authorization



	Ativelle	Cenestin	FemHRT	Prefest	Premarin	PremPro	Evista
Spring 2001	63%	26%	43%	53%	0%	0%	58%
Fall 2001	86%	49%	50%	77%	0%	3%	40%

Source: WYE 203123

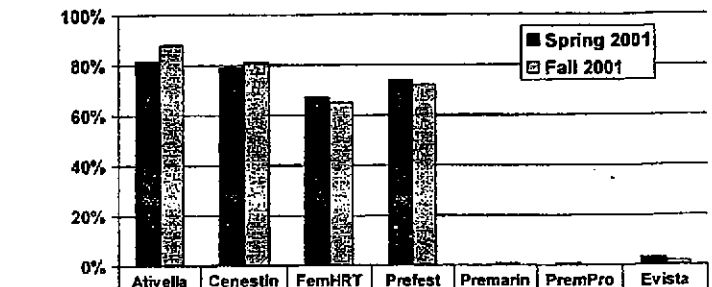
- "Overall, the Premarin Family continues to remain unaffected by HMOs' prior authorization requirements. However, all competing products in the HRT/ERT market, excluding Evista, experienced an increase in their prior authorization coverage during fall 2001. Ortho-Prefest experienced the largest growth between audit cycles, in terms of prior authorization coverage."[84]

[84] WYE203123

Copied from WYE203123.

- **Covered at Third-Tier co-pay** – "A drug listed in a third tier. Health plan members enrolled in a three-tier benefit design must pay a higher co-pay for the drug."

Covered at Third-Tier Co-Pay



	Ativella	Cenestin	FemHRT	Prefest	Premarin	PremPro	Evista
Spring 2001	82%	79%	67%	74%	0%	1%	3%
Fall 2001	88%	81%	55%	72%	1%	0%	2%

Source: WYE 203124

  - "The Premarin Family is not affected by three-tier coverage, unlike competing products within the market. With the exception of Evista, the majority of products within this market have a relatively high three tier co-pay status. Evista decreased its three-tier coverage between the two audit cycles, from 33% in the spring to 29% in the fall."[85]

- **(AHP 366155)** – The Scott-Levin Spring 2002 Managed Care Formulary Drug Audit is detailed in this confidential memorandum from the Managed Markets Customer Planning, 9/02 dated August 12, 2002.

The Women's Health Initiative (WHI) did not affect the coverage of ET/HT products within the managed care formularies

  - The majority of health plans stated the WHI (Women's Health Initiative) Cognitive findings that appeared in a recent JAMA article had no effect at all on the coverage of ET/HT products within their formularies.[86]

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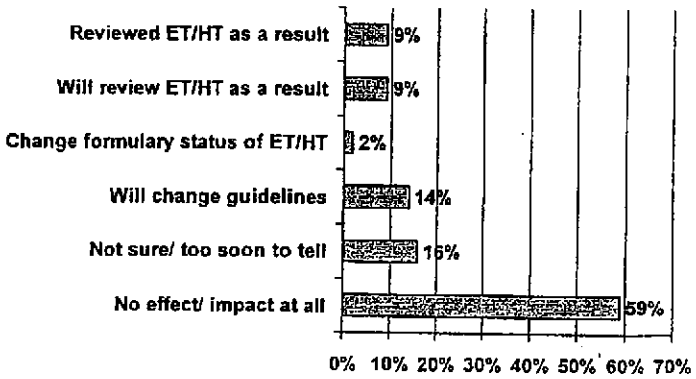
[85] WYE203123
[86] "Premarin Diagnostic"; October, 2003; AHP 339064.

Copied from AHP339064.

Impact of WHI Cognitive Findings on ET/HT Coverage



Source: Custom MCO Panel – July 2003; AHP 339064.

The effect of tier positioning on a product's performance in the market.

The tier position for a product is of extreme importance. For example, Wyeth knew that in most occurrences of 2nd to 3rd tier position switches, the switched products lost substantial in-plan market share during the 6-12 month period immediately following the switch. Mitigating factors included brand loyalty, co-pay differentials, and restrictions.[87]

The following graph illustrates the phenomenon of market contraction when Wyeth's ET/HT products lost their formulary preferred status in the Aetna account when Premarin was switched to the third tier in January 2003.[88]

Copied from AHP 343345.

Aetna Pharmacy Management

	4Q 02	1Q 03	Difference	Percentage Decrease
Premarin Tab	8,179,191	6,435,965	-1,743,226	-21.31%
PremPhase Tab	311,234	214,394	-96,840	-31.11%
Prempro Tab	2,534,444	1,696,820	-837,642	-33.05%
All	11,024,869	8,347,179	-2,677,690	-24.29%

[87] Putnam Associates; The Premarin Family Pricing Project; August 21, 2002; AHP 256828
[88] AHP 343345

The following summarizes the CIGNA data during this same time period. CIGNA did not change the formulary position for Premarin during this time period as Aetna had done.

- **(AHP 338598)** - October 2003 correspondence between Kate Eby Moore and Margaret Glassman (the memo indicates that Glassman is an analyst at Wyeth) with copies going to Betty Jean Swartz summarizes the analyst's assessment of the differing market performance for Premarin between the Aetna and the CIGNA account.

    - 10/10/03 Margaret Glassman queries Kate Moor – "...Looks like Aetna has had a significant decrease in P3 use – significantly greater than similar plans. I'm also attaching, as a comparison, CIGNA's data from the same period. I chose CIGNA because 4Q 02 sales were very similar at $8.5M/quarter and membership is fairly close: 7.5M members for Aetna, 8.5M for CIGNA."

    - Two hours later on 10/10/03 Kate Moor responds – "...If there was a 42% drop in sales, what part of that was the formulary issue and what part of that was the WHI? If you got back on formulary, how much is that worth a mo/qtr/year?"

    - Half an hour later, Glassman responds: "...Aetna decreased 42% while a similar plan, like CIGNA, only decreased 15%. I'm not sure if that means we can attribute the additional 30% decrease to Premarin being non-formulary at Aetna, but I'm sure a big portion of it is directly related to the $15 higher co-pay. So before removal from formulary we sold $8.5M/quarter and if the natural erosion due to WHI from 4Q 02 to 2Q 03 was only 15% we should still be selling 7.3M, yet our analysis indicates that we're actually only selling approximately 5M/quarter. In round numbers, our NF (non-formulary) status could be costing us $8M/year."

    - Thus it would appear that Wyeth suffered both from the WHI report (15% loss in sales volume) and from the loss of the formulary preferred position in accounts such as Aetna (46% [=$7.3/$5] drop in sales volume). Clearly, the variable that affected Wyeth's market performance was the loss of preferred status on the formulary. In fact, the order of magnitude was roughly a factor of three.